# Amphibole Thermobarometers

| Reference | Name in Thermobar | T-dependent? | P-dependent? | $H_2O$-dependent? |
|---|---|---|---|---|
| **Amphibole-Liquid Barometry. *Function "calculate_amp_liq_press"*** | | | | |
| Putirka (2016) | P_Put2016_eq7a | ✗ | | ✓ |
| | P_Put2016_eq7b | ✗ | | ✓* |
| | P_Put2016_eq7c | ✗ | | ✗ |
| **Amphibole-Liquid Thermometry. *Function "calculate_amp_liq_temp"*** | | | | |
| Putirka (2016) | T_Put2016_eq4b | | ✗ | ✓ |
| | T_Put2016_eq4a_amp_sat | | ✗ | ✓* |
| | T_Put2016_eq9 | | ✗ | ✓* |
| **Amphibole-only Barometry. *Function "calculate_amp_only_press"*** | | | | |
| Medard & Pennec (2022)[*2] | P_Medard2022_RidolfiSites<br>P_Medard2022_LeakeSites<br>P_Medard2022_MutchSites | | | |
| Ridolfi and Renzulli (2012)<br>&<br>Ridolfi (2021) | P_Ridolfi2012_1a | ✗ | | ✗ |
| | P_Ridolfi2012_1b | ✗ | | ✗ |
| | P_Ridolfi2012_1c | ✗ | | ✗ |
| | P_Ridolfi2012_1d | ✗ | | ✗ |
| | P_Ridolfi2012_1e | ✗ | | ✗ |
| | **P_Ridolfi2021**[*3] | ✗ | | ✗ |
| Mutch et al. (2016) | P_Mutch2016 | ✗ | | ✗ |
| Ridolfi et al. (2010) | P_Ridolfi2010 | ✗ | | ✗ |
| Hammerstrom & Zen (1986) | P_Hammarstrom1986_eq1 | ✗ | | ✗ |
| | P_Hammarstrom1986_eq2 | ✗ | | ✗ |
| | P_Hammarstrom1986_eq3 | ✗ | | ✗ |
| Hollister et al. (1987) | P_Hollister1987 | ✗ | | ✗ |
| Johnson & Rutherford (1989) | P_Johnson1989 | ✗ | | ✗ |
| Blundy et al. (1990) | P_Blundy1990 | ✗ | | ✗ |
| Schmidt (1992) | P_Schmidt1992 | ✗ | | ✗ |
| Anderson & Smith, 1995 | P_Anderson1995 | ✓ | | ✗ |
| Krawczynski et al. (2012) | P_Kraw2012 | ✗ | | ✗ |
| **Amphibole-only Thermometry. *Function "calculate_amp_only_temp"*** | | | | |
| Putirka (2016) | T_Put2016_eq5 | | ✗ | ✗ |
| | T_Put2016_eq6 | | ✗ | ✗ |
| | T_Put2016_SiHbl | | ✗ | ✗ |
| | T_Put2016_eq8 | | ✓ | ✗ |
| Ridolfi and Renzuli, 2012 | T_Ridolfi2012 | | ✓ | ✗ |
| **Amphibole-Plagioclase Thermometry. Function "*calculate_amp_plag_temp*"** | | | | |
| Holland and Blundy, 1994 | T_HB1994_A<br>T_HB1994_B | | ✓ | ✗ |

✓* $H_2O$-dependence because of parameterization in terms of hydrous fractions, not a specific $H_2O$-term

[*2] We provide 3 options for how to calculate $Al^{VI}$

[*2] EquationP=" **P_Ridolfi2021"** uses an algorithm to combine results of eq1a-1e